



Sequence Listing

<110> Ashkenazi, Avi J.
Schwall, Ralph H.

<120> Apo-2 Ligand

<130> P0978P3C1

<140> US 09/479,252

<141> 2000-01-07

<150> US 09/060,533

<151> 1998-04-15

<150> US 09/007,886

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<151> 1997-01-08

<150> US 60/009,755

<151> 1996-01-09

<160> 17

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<211> 281

<212> PRT

<213> Homo sapiens

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Met	Ala	Met	Met	Glu	Val	Gln	Gly	Gly	Pro	Ser	Leu	Gly	Gln	Thr
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Cys	Val	Leu	Ile	Val	Ile	Phe	Thr	Val	Leu	Leu	Gln	Ser	Leu	Cys
			20						25					30

Val	Ala	Val	Thr	Tyr	Val	Tyr	Phe	Thr	Asn	Glu	Leu	Lys	Gln	Met
				35					40					45

Gln	Asp	Lys	Tyr	Ser	Lys	Ser	Gly	Ile	Ala	Cys	Phe	Leu	Lys	Glu
				50					55					60

Asp	Asp	Ser	Tyr	Trp	Asp	Pro	Asn	Asp	Glu	Glu	Ser	Met	Asn	Ser
				65					70					75

Pro	Cys	Trp	Gln	Val	Lys	Trp	Gln	Leu	Arg	Gln	Leu	Val	Arg	Lys
				80					85					90

Met	Ile	Leu	Arg	Thr	Ser	Glu	Glu	Thr	Ile	Ser	Thr	Val	Gln	Glu
				95					100					105

Lys	Gln	Gln	Asn	Ile	Ser	Pro	Leu	Val	Arg	Glu	Arg	Gly	Pro	Gln
			110						115					120

Arg	Val	Ala	Ala	His	Ile	Thr	Gly	Thr	Arg	Gly	Arg	Ser	Asn	Thr
				125					130					135

Leu	Ser	Ser	Pro	Asn	Ser	Lys	Asn	Glu	Lys	Ala	Leu	Gly	Arg	Lys
				140					145					150

Ile	Asn	Ser	Trp	Glu	Ser	Ser	Arg	Ser	Gly	His	Ser	Phe	Leu	Ser	
				155					160					165	
Asn	Leu	His	Leu	Arg	Asn	Gly	Glu	Leu	Val	Ile	His	Glu	Lys	Gly	
				170					175					180	
Phe	Tyr	Tyr	Ile	Tyr	Ser	Gln	Thr	Tyr	Phe	Arg	Phe	Gln	Glu	Glu	
				185					190					195	
Ile	Lys	Glu	Asn	Thr	Lys	Asn	Asp	Lys	Gln	Met	Val	Gln	Tyr	Ile	
				200					205					210	
Tyr	Lys	Tyr	Thr	Ser	Tyr	Pro	Asp	Pro	Ile	Leu	Leu	Met	Lys	Ser	
				215					220					225	
Ala	Arg	Asn	Ser	Cys	Trp	Ser	Lys	Asp	Ala	Glu	Tyr	Gly	Leu	Tyr	
				230					235					240	
Ser	Ile	Tyr	Gln	Gly	Gly	Ile	Phe	Glu	Leu	Lys	Glu	Asn	Asp	Arg	
				245					250					255	
Ile	Phe	Val	Ser	Val	Thr	Asn	Glu	His	Leu	Ile	Asp	Met	Asp	His	
				260					265					270	
Glu	Ala	Ser	Phe	Phe	Gly	Ala	Phe	Leu	Val	Gly					
				275					280						

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<212> DNA

<213> Homo sapiens

<400> 2

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tgagaggtcca ggggggaccc agcctgggac agacctgcgt gctgatcgtg 150
atcttcacag tgctcctgca gtctctctgt gtggctgtaa cttacgtgta 200
ctttaccaac gagctgaagc agatgcagga caagtactcc aaaagtggca 250
ttgcttgttt cttaaaagaa gatgacagtt attgggaccc caatgacgaa 300
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aagaaaagca acaaaatatt tctcccctag tgagagaaag aggtcctcag 450
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gggaatcatc aaggagtggg cattcattcc tgagcaactt gcacttgagg 600
aatggtgaac tgggtcatcca tgaaaaaggg ttttactaca tctattccca 650
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aacaaatggg ccaatatatt tacaaatata caagttatcc tgaccctata 750

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ttgttgatga aaagtgctag aaatagttgt tggctctaaag atgcagaata 800
 tggactctat tccatctatc aagggggaat atttgagctt aaggaaaatg 850
 acagaatttt tgtttctgta acaaatgagc acttgataga catggaccat 900
 gaagccagtt ttttcggggc ctttttagtt ggctaactga cctggaaaga 950
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 <212> DNA
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 gggaccccaa tgacgaagag agtatgaaca gccctgctg gcaagtcaag 50
 tggcaactcc gtcagctcgt tagaaagatg attttgagaa cctctgagga 100
 aaccatttct acagttcaag aaaagcaaca aaatatttct cccctagtga 150
 gagaaagagg tcctcagaga gtagcagctc acataactgg gaccagagga 200
 agaagcaaca cattgtcttc tccaaactcc aagaatgaaa aggctctggg 250
 ccgcaaaata aactcctggg aatcatcaag gagtgggcat tcattcctga 300
 gcaacttgca cttgaggaat ggtgaactgg tcatccatga aaaagggttt 350
 tactacatct attcccaaac atactttcga tttcaggagg 390

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 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Sequence is synthesized

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 tgacgaagag agtatgaaca gccctgctg gcaagtcaag tggcaactcc 50
 gtcagctcgt 60

<210> 5
 <211> 60
 <212> DNA
 <213> Artificial Sequence

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<400> 5
 ggtgaactgg tcatccatga aaaagggttt tactacatct attcccaaac 50
 atactttcga 60

<210> 6
 <211> 13
 <212> PRT

<213> Artificial Sequence

<220>

<223> Sequence is synthesized

<400> 6

Ser Met Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn
1 5 10

<210> 7

<211> 27

<212> PRT

<213> Artificial Sequence

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<223> Sequence is synthesized

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Lys Tyr Ala Leu Ala Asp Ala Ser Leu Lys Met Ala Asp Pro Asn
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Arg Phe Arg Gly Lys Asp Leu Pro Val Leu Asp Gln
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<210> 8

<211> 24

<212> PRT

<213> Artificial Sequence

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<400> 8

Met Gly His His His His His His His His His Ser Ser Gly
1 5 10 15

His Ile Asp Asp Asp Asp Lys His Met
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<210> 9

<211> 175

<212> PRT

<213> Homo sapiens

<400> 9

Asp Pro Ala Gly Leu Leu Asp Leu Arg Gln Gly Met Phe Ala Gln
1 5 10 15

Leu Val Ala Gln Asn Val Leu Leu Ile Asp Gly Pro Leu Ser Trp
20 25 30

Tyr Ser Asp Pro Gly Leu Ala Gly Val Ser Leu Thr Gly Gly Leu
35 40 45

Ser Tyr Lys Glu Asp Thr Lys Glu Leu Val Val Ala Lys Ala Gly
50 55 60

Val Tyr Tyr Val Phe Phe Gln Leu Glu Leu Arg Arg Val Val Ala
65 70 75

Gly Glu Gly Ser Gly Ser Val Ser Leu Ala Leu His Leu Gln Pro
80 85 90

Leu	Arg	Ser	Ala	Ala	Gly	Ala	Ala	Ala	Leu	Ala	Leu	Thr	Val	Asp
				95					100					105
Leu	Pro	Pro	Ala	Ser	Ser	Glu	Ala	Arg	Asn	Ser	Ala	Phe	Gly	Phe
				110					115					120
Gln	Gly	Arg	Leu	Leu	His	Leu	Ser	Ala	Gly	Gln	Arg	Leu	Gly	Val
				125					130					135
His	Leu	His	Thr	Glu	Ala	Arg	Ala	Arg	His	Ala	Trp	Gln	Leu	Thr
				140					145					150
Gln	Gly	Ala	Thr	Val	Leu	Gly	Leu	Phe	Arg	Val	Thr	Pro	Glu	Ile
				155					160					165
Pro	Ala	Gly	Leu	Pro	Ser	Pro	Arg	Ser	Glu					
				170					175					

<210> 10
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<400> 10

Val	Ser	His	Arg	Tyr	Pro	Arg	Ile	Gln	Ser	Ile	Lys	Val	Gln	Phe
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Thr	Glu	Tyr	Lys	Lys	Glu	Lys	Gly	Phe	Ile	Leu	Thr	Ser	Gln	Lys
				20					25					30
Glu	Asp	Glu	Ile	Met	Lys	Val	Gln	Asn	Asn	Ser	Val	Ile	Ile	Asn
				35					40					45
Cys	Asp	Gly	Phe	Tyr	Leu	Ile	Ser	Leu	Lys	Gly	Tyr	Phe	Ser	Gln
				50					55					60
Glu	Val	Asn	Ile	Ser	Leu	His	Tyr	Gln	Lys	Asp	Glu	Glu	Pro	Leu
				65					70					75
Phe	Gln	Leu	Lys	Lys	Val	Arg	Ser	Val	Asn	Ser	Leu	Met	Val	Ala
				80					85					90
Ser	Leu	Thr	Tyr	Lys	Asp	Lys	Val	Tyr	Leu	Asn	Val	Thr	Thr	Asp
				95					100					105
Asn	Thr	Ser	Leu	Asp	Asp	Phe	His	Val	Asn	Gly	Gly	Glu	Leu	Ile
				110					115					120
Leu	Ile	His	Gln	Asn	Pro	Gly	Glu	Phe	Cys	Val	Leu			
				125					130					

<210> 11
 <211> 151
 <212> PRT
 <213> Homo sapiens

<400> 11

Gln	Gln	Gln	Leu	Pro	Leu	Glu	Ser	Leu	Gly	Trp	Asp	Val	Ala	Glu
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Leu	Gln	Leu	Asn	His	Thr	Gly	Pro	Gln	Gln	Asp	Pro	Arg	Leu	Tyr
				20					25					30

Trp	Gln	Gly	Gly	Pro	Ala	Leu	Gly	Arg	Ser	Phe	Leu	His	Gly	Pro
				35					40					45
Glu	Leu	Asp	Lys	Gly	Gln	Leu	Arg	Ile	His	Arg	Asp	Gly	Ile	Tyr
				50					55					60
Met	Val	His	Ile	Gln	Val	Thr	Leu	Ala	Ile	Cys	Ser	Ser	Thr	Thr
				65					70					75
Ala	Ser	Arg	His	His	Pro	Thr	Thr	Leu	Ala	Val	Gly	Ile	Cys	Ser
				80					85					90
Pro	Ala	Ser	Arg	Ser	Ile	Ser	Leu	Leu	Arg	Leu	Ser	Phe	His	Phe
				95					100					105
His	Gln	Gly	Cys	Thr	Ile	Val	Ser	Gln	Arg	Leu	Thr	Pro	Leu	Ala
				110					115					120
Arg	Gly	Asp	Thr	Leu	Cys	Thr	Asn	Leu	Thr	Gly	Thr	Leu	Leu	Pro
				125					130					135
Ser	Arg	Asn	Thr	Asp	Glu	Thr	Phe	Phe	Gly	Val	Gln	Trp	Val	Arg
				140					145					150

Pro

<210> 12
 <211> 148
 <212> PRT
 <213> Homo sapiens

<400> 12

Leu	Cys	Ile	Leu	Lys	Arg	Ala	Pro	Phe	Lys	Lys	Ser	Trp	Ala	Tyr
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Leu	Gln	Val	Ala	Lys	His	Leu	Asn	Lys	Thr	Lys	Leu	Ser	Trp	Asn
				20					25					30
Lys	Asp	Gly	Ile	Leu	His	Gly	Val	Arg	Tyr	Gln	Asp	Gly	Asn	Leu
				35					40					45
Val	Ile	Gln	Phe	Pro	Gly	Leu	Tyr	Phe	Ile	Ile	Cys	Gln	Leu	Gln
				50					55					60
Phe	Leu	Val	Gln	Cys	Pro	Asn	Asn	Ser	Val	Asp	Leu	Lys	Leu	Glu
				65					70					75
Leu	Leu	Ile	Asn	Lys	His	Ile	Lys	Lys	Gln	Ala	Leu	Val	Thr	Val
				80					85					90
Cys	Glu	Ser	Gly	Met	Gln	Thr	Lys	His	Val	Tyr	Gln	Asn	Leu	Ser
				95					100					105
Gln	Phe	Leu	Leu	Asp	Tyr	Leu	Gln	Val	Asn	Thr	Thr	Ile	Ser	Val
				110					115					120
Asn	Val	Asp	Thr	Phe	Gln	Tyr	Ile	Asp	Thr	Ser	Thr	Phe	Pro	Leu
				125					130					135
Glu	Asn	Val	Leu	Ser	Ile	Phe	Leu	Tyr	Ser	Asn	Ser	Asp		
				140					145					

<210> 13
 <211> 157
 <212> PRT
 <213> Homo sapiens

<400> 13
 Val Arg Ser Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala His
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 Val Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn
 20 25 30
 Arg Arg Ala Asn Ala Leu Leu Ala Asn Gly Val Glu Leu Arg Asp
 35 40 45
 Asn Gln Leu Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser
 50 55 60
 Gln Val Leu Phe Lys Gly Gln Gly Cys Pro Ser Thr His Val Leu
 65 70 75
 Leu Thr His Thr Ile Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys
 80 85 90
 Val Asn Leu Leu Ser Ala Ile Lys Ser Pro Cys Gln Arg Glu Thr
 95 100 105
 Pro Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu Pro Ile Tyr Leu
 110 115 120
 Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser Ala Glu
 125 130 135
 Ile Asn Arg Pro Asp Tyr Leu Asp Phe Ala Glu Ser Gly Gln Val
 140 145 150
 Tyr Phe Gly Ile Ile Ala Leu
 155

<210> 14
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 <213> Homo sapiens

<400> 14
 Glu Glu Pro Glu Thr Asp Leu Ser Pro Gly Leu Pro Ala Ala His
 1 5 10 15
 Leu Ile Gly Ala Pro Leu Lys Gly Gln Gly Leu Gly Trp Glu Thr
 20 25 30
 Thr Lys Glu Gln Ala Phe Leu Thr Ser Gly Thr Gln Phe Ser Asp
 35 40 45
 Ala Glu Gly Leu Ala Leu Pro Gln Asp Gly Leu Tyr Tyr Leu Tyr
 50 55 60
 Cys Leu Val Gly Tyr Arg Gly Arg Ala Pro Pro Gly Gly Gly Asp
 65 70 75
 Pro Gln Gly Arg Ser Val Thr Leu Arg Ser Ser Leu Tyr Arg Ala
 80 85 90

Gly	Gly	Ala	Tyr	Gly	Pro	Gly	Thr	Pro	Glu	Leu	Leu	Leu	Glu	Gly
				95					100					105
Ala	Glu	Thr	Val	Thr	Pro	Val	Leu	Asp	Pro	Ala	Arg	Arg	Gln	Gly
				110					115					120
Tyr	Gly	Pro	Leu	Trp	Tyr	Thr	Ser	Val	Gly	Phe	Gly	Gly	Leu	Val
				125					130					135
Gln	Leu	Arg	Arg	Gly	Glu	Arg	Val	Tyr	Val	Asn	Ile	Ser	His	Pro
				140					145					150
Asp	Met	Val	Asp	Phe	Ala	Arg	Gly	Lys	Thr	Phe	Phe	Gly	Ala	Val
				155					160					165

Met Val Gly

<210> 15
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 <213> Homo sapiens

<400> 15

Pro	Lys	Met	His	Leu	Ala	His	Ser	Thr	Leu	Lys	Pro	Ala	Ala	His
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Leu	Ile	Gly	Asp	Pro	Ser	Lys	Gln	Asn	Ser	Leu	Leu	Trp	Arg	Ala
				20					25					30
Asn	Thr	Asp	Arg	Ala	Phe	Leu	Gln	Asp	Gly	Phe	Ser	Leu	Ser	Asn
				35					40					45
Asn	Ser	Leu	Leu	Val	Pro	Thr	Ser	Gly	Ile	Tyr	Phe	Val	Tyr	Ser
				50					55					60
Gln	Val	Val	Phe	Ser	Gly	Lys	Ala	Tyr	Ser	Pro	Lys	Ala	Thr	Ser
				65					70					75
Ser	Pro	Leu	Tyr	Leu	Ala	His	Glu	Val	Gln	Leu	Phe	Ser	Ser	Gln
				80					85					90
Tyr	Pro	Phe	His	Val	Pro	Leu	Leu	Ser	Ser	Gln	Lys	Met	Val	Tyr
				95					100					105
Pro	Gly	Leu	Gln	Glu	Pro	Trp	Leu	His	Ser	Met	Tyr	His	Gly	Ala
				110					115					120
Ala	Phe	Gln	Leu	Thr	Gln	Gly	Asp	Gln	Leu	Ser	Thr	His	Thr	Asp
				125					130					135
Gly	Ile	Pro	His	Leu	Val	Leu	Ser	Pro	Ser	Thr	Val	Val	Phe	Phe
				140					145					150

Gly Ala Phe Ala Leu
 155

<210> 16
 <211> 149
 <212> PRT
 <213> Homo sapiens

<400> 16

Met	Gln	Lys	Gly	Asp	Gln	Asn	Pro	Gln	Ile	Ala	Ala	His	Val	Ile
1				5					10					15
Ser	Glu	Ala	Ser	Ser	Lys	Thr	Thr	Ser	Val	Leu	Gln	Trp	Ala	Glu
				20					25					30
Lys	Gly	Tyr	Tyr	Thr	Met	Ser	Asn	Asn	Leu	Val	Thr	Leu	Glu	Asn
				35					40					45
Gly	Lys	Gln	Leu	Thr	Val	Lys	Arg	Gln	Gly	Leu	Tyr	Tyr	Ile	Tyr
				50					55					60
Ala	Gln	Val	Thr	Phe	Cys	Ser	Asn	Arg	Glu	Ala	Ser	Ser	Gln	Ala
				65					70					75
Pro	Phe	Ile	Ala	Ser	Leu	Cys	Leu	Lys	Ser	Pro	Gly	Arg	Phe	Glu
				80					85					90
Arg	Ile	Leu	Leu	Arg	Ala	Ala	Asn	Thr	His	Ser	Ser	Ala	Lys	Pro
				95					100					105
Cys	Gly	Gln	Gln	Ser	Ile	His	Leu	Gly	Gly	Val	Phe	Glu	Leu	Gln
				110					115					120
Pro	Gly	Ala	Ser	Val	Phe	Val	Asn	Val	Thr	Asp	Pro	Ser	Gln	Val
				125					130					135
Ser	His	Gly	Thr	Gly	Phe	Thr	Ser	Phe	Gly	Leu	Leu	Lys	Leu	
				140					145					

<210> 17
 <211> 149
 <212> PRT
 <213> Homo sapiens

Pro	Ser	Pro	Pro	Pro	Glu	Lys	Lys	Glu	Leu	Arg	Lys	Val	Ala	His
1				5					10					15
Leu	Thr	Gly	Lys	Ser	Asn	Ser	Arg	Ser	Met	Pro	Leu	Glu	Trp	Glu
				20					25					30
Asp	Thr	Tyr	Gly	Ile	Val	Val	Leu	Leu	Ser	Gly	Val	Lys	Tyr	Lys
				35					40					45
Lys	Gly	Gly	Leu	Val	Ile	Asn	Glu	Thr	Gly	Leu	Tyr	Phe	Val	Tyr
				50					55					60
Ser	Lys	Val	Tyr	Phe	Arg	Gly	Gln	Ser	Cys	Asn	Asn	Leu	Pro	Leu
				65					70					75
Ser	His	Lys	Val	Tyr	Met	Arg	Asn	Ser	Lys	Tyr	Pro	Gln	Asp	Leu
				80					85					90
Val	Met	Met	Glu	Gly	Lys	Met	Met	Ser	Tyr	Cys	Thr	Thr	Gly	Gln
				95					100					105
Met	Trp	Ala	Arg	Ser	Ser	Tyr	Leu	Gly	Ala	Val	Phe	Asn	Leu	Thr
				110					115					120
Ser	Ala	Asp	His	Leu	Tyr	Val	Asn	Val	Ser	Glu	Leu	Ser	Leu	Val
				125					130					135

Asn Phe Glu Glu Ser Gln Thr Phe Phe Gly Leu Tyr Lys Leu
140 145